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PTO/SB/21 (09-04)

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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

38

Application Number

PATENT

6,948,279

Filing Date

ISSUE

September 27, 2005

First Named Inventor

Newton et al.

Art Unit

Examiner Name

Attorney Docket Number

RCAL-5

ENCLOSURES (Check all that apply)

- Fee Transmittal Form
- Fee Attached
- Amendment/Reply
 - After Final
 - Affidavits/declaration(s)
- Extension of Time Request
- Express Abandonment Request
- Information Disclosure Statement
- Certified Copy of Priority Document(s)
- Reply to Missing Parts/ Incomplete Application
 - Reply to Missing Parts under 37 CFR 1.52 or 1.53

- Drawing(s)
- Licensing-related Papers
- Petition
 - Petition to Convert to a Provisional Application
 - Power of Attorney, Revocation
 - Change of Correspondence Address
- Terminal Disclaimer
- Request for Refund
- CD, Number of CD(s) _____
- Landscape Table on CD

Remarks

- After Allowance Communication to TC
- Appeal Communication to Board of Appeals and Interferences
- Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
- Proprietary Information
- Status Letter
- Other Enclosure(s) (please identify below):
 - Paperwork to obtain a certificate of correction Post Card

Certificate
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of Correction

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name

Brown & Michaels, PC

Signature

Printed name

Meghan A. Van Leeuwen

Date

10/19/05

Reg. No.

45,612

CERTIFICATE OF TRANSMISSION/MAILING

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Justin Wood

Date

10/19/05

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Patent No. 6,948,279

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Number: 6,948,279

Issued: September 27, 2005

Name of Patentee: Newton et al.

Title of Invention: SUPPORT SYSTEM FOR LATERALLY REMOVABLE SASH

Commissioner of Patents and Trademarks

Washington, DC 20231

Attn: Certificate of Correction Branch

**REQUEST FOR CERTIFICATE OF CORRECTION OF PATENT
FOR PTO MISTAKE (37 CFR 1.322)**

1. Attached in duplicate is Form PTO/SB/44 with at least one copy being suitable for printing.

2. Attached are copies of the following:

- Office action response dated April 28, 2005
- Notice of allowance and Examiner's amendment dated June 1, 2005
- Copy of the relevant claims for issued patent 6,948,279 (Columns 5 through 8)

3. The exact page and line numbers where errors occur in the application file are:

Claim 14 (Column 6, line 50): "from sash support elements each formed of" should read "of sash support elements each formed from"

Claim 16 (Column 7, line 4): "shoe pr-file" should read "shoe"

Claim 23 (Column 7, line 26): "wherein of" should read "wherein"

Claim 24 (Column 7, line 29): "aim" should read "arm"

4. Regarding these errors introduced by the patent office, the correct wording is found in the listing of claims of the office action response dated April 28, 2005 and in the Examiner's amendment dated June 1, 2005. More specifically, the correct wording for each of the errors can be found:

Claim 14 (claim 39 in the application, as filed): page 6, claim 39, line 2 of the office action response dated April 28, 2005 and page 5, line 11 of the Notice of Allowance and Examiner's amendment dated June 1, 2005. The incorrect occurrence of "of" was changed to "from" in the patent. This is clear from the correct wording of "from a metal extrusion", in claims 30 and 32 of the issued patent.

Claim 16 (claim 41 in the application as filed): page 6, claim 41, line 1 of the office action response dated April 28, 2005.

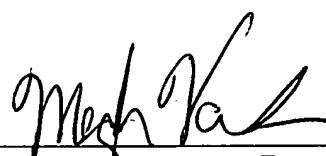
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Claim 23 (claim 46 in the application, as filed): page 7, claim 46, line 1 of the office action response dated April 28, 2005 and page 5, line 14 of the Notice of Allowance and Examiner's amendment dated June 1, 2005.

Claim 24 (claim 47 in the application as filed): page 7, claim 47, line 1 of the office action response dated April 28, 2005.

5. Please send the Certificate to:

Meghan Van Leeuwen
Brown & Michaels, P.C.
400 M&T Bank Building
118 North Tioga Street
Ithaca, New York 14850-4343

By: 
Meghan Van Leeuwen, Reg. No. 45,612
Agent of Record
Date: 10/7/05

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2005

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,948,279

DATED: September 27, 2005

INVENTOR: Newton et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 6, line 50: replace "from sash support elements each formed of" with "of sash support elements each formed from"

Column 7, line 4: replace "shoe pr-file" with "shoe"

Column 7, line 26: replace "wherein of" with "wherein"

Column 7, line 29: replace "aim" with "arm"

MAILING ADDRESS OF SENDER:

PATENT NO. 6,948,279

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Ithaca, New York 14850-4343

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,948,279

DATED: September 27, 2005

INVENTOR: Newton et al.

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Column 6, line 50: replace "from sash support elements each formed of" with "of sash support elements each formed from"

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Column 7, line 29: replace "aim" with "arm"

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(PTO FORM PTO/SB/44)

OCT 19 2005

place. A downwardly extending projection 52 engages spring 40 to prevent movement beyond a resilient latching position, as illustrated.

Hook 45 has a latching nose 48 that latches into an opening 42 in spring 40, as illustrated in FIG. 5. Latching nose 48 and spring 40 are preferably configured so that shoe-locking hook 45 can be manually pushed into the latched position shown in FIG. 5. Unlatching shoe lock 45 for deployment preferably requires pressing a screwdriver blade in between hook end 46 and the free end 49 of spring 40. This makes the accidental deployment of shoe locks 45 unlikely.

Shoe lock 45 is also preferably cut from an indefinite length of a metal extrusion. This can give hook 45 the necessary strength to resist the counterbalance bias, while also keeping hook 45 inexpensive. Although lances 47 are preferred for their simplicity and effectiveness in interacting with locks 45, other projections or interlock discontinuities in jamb 11 are also possible.

When the elements of the inventive sash support system are assembled and operated, as shown schematically in FIGS. 1-3, they meet all the objectives of the invention. They reduce the cost of a sash support system while improving its convenience, effectiveness, and reliability. They also allow a window sash to be easily raised or lowered by a person who may weigh less than the sash.

We claim:

1. A system supporting a sash that is laterally removable from between opposed window jambs, the system comprising:

a. a pair of sash support arms mounted to hang freely downward on respective opposite stiles of the sash and to pivot from downwardly hanging positions to outwardly extended positions that the support arms assume when supporting the sash;

b. the sash support arms in the downwardly hanging positions being disposed so that as the sash is lowered toward a supported position, the downwardly hanging arms engage sash supporting platforms of counterbalanced sash shoes locked into the jambs so that sash-lowering engagement between the arms and the platforms pivots the arms outward along the platforms; and

c. outer end regions of the sash support arms in the outwardly extended positions rest on outer regions of the platforms spaced from the sash and arranged vertically under counterbalance elements connected to the shoes to support the weight of the sash.

2. The system of claim 1 wherein the sash supporting platforms of the shoes extend toward the sash stiles so that inner regions of the platforms engage the sash support arms in the downwardly hanging positions and so that the outer regions of the platforms engage the outer end regions of the sash support arms in the outwardly extended positions.

3. The system of claim 2 wherein the counterbalance elements are connected to the shoes vertically above the outer platform regions.

4. The system of claim 1 wherein the shoes include locking elements deployable to lock the shoes to jamb projections during removal and replacement of the sash.

5. The system of claim 4 wherein the locking elements are pivotally mounted on the shoes and are adapted to be latched in undeployed positions out of engagement with the jamb projections.

6. The system of claim 4 wherein the locking elements are formed as extruded metal hooks.

7. The system of claim 1 wherein the shoes and the sash support arms are each formed by metal extrusion.

8. The system of claim 7 wherein the shoes can be formed with different widths.

9. The system of claim 8 wherein each shoe having one of the different widths is adapted to connect to a corresponding number of the counterbalance elements.

10. The system of claim 7 wherein the extrusion for the sash support arms can be formed in different lengths.

11. The system of claim 10 wherein the sash support arms have extruded code lines indicating a size thereof.

12. In a system counterbalancing a window sash supported by a pair of counterbalanced sash shoes so that the sash extends between a pair of jambs from which the sash is removable by maneuvering the sash upward and laterally while the shoes are locked to the jambs, the improvement comprising:

a. the shoes including locking elements comprising hooks that catch on and engage jamb projections, to lock the shoes with respect to the jamb during sash removal and including replacement and latches that latch the locking elements in undeployed positions out of engagement with the jamb projections and the shoes being formed from a metal extrusion having a predetermined profile; and

b. each shoe comprising a single piece having a hook-shaped upper region formed to interconnect with a counterbalance element and an L-shaped lower region forming a platform extending toward the sash from vertically below the upper region.

13. In a system counterbalancing a window sash supported by a pair of counterbalanced sash shoes so that the sash extends between a pair of jambs from which the sash is removable by maneuvering the sash upward and laterally while the shoes are locked to the jambs, the improvement comprising:

a. the shoes being formed from a metal extrusion having a predetermined profile and including latch retaining grooves for receiving hook latches and pin grooves for receiving pivot pins of the hook latches and each shoe includes a mid-region being formed to support a guide that slides in a respective one of the jambs to guide vertical movement of the shoe and includes a guide retaining groove for receiving the guide; and

b. each shoe comprising a single piece having a hook-shaped upper region formed to interconnect with a counterbalance element and an L-shaped lower region forming a platform extending toward the sash from vertically below the upper region.

14. A sash support system comprising:

a. a plurality of sash support elements each formed of a metal extrusion having a profile establishing a respective configuration of each element;

b. the configuration of a first one of the extruded elements forming a shoe extending in a single extruded piece from a hook-shaped upper region engaging a counterbalance to a platform-shaped lower region supporting a sash; and

c. the configuration of a second one of the extruded elements forming a sash support arm pivotally connected to a stile of the sash to engage the platform-shaped lower region of the shoe when the sash support arm is in an outwardly extending position extending outwardly of the sash and to drop to a downwardly dependent position when the sash support arm does not engage the platform shaped lower region.

15. The system of claim 14 wherein the configuration of a third one of the extruded elements forms a shoc lock

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connected to the shoe below the platform shaped lower region to be movable between deployed and undeployed positions.

16. The system of claim 15 wherein the shoe profile includes a pin groove for receiving a pivot pin supporting the shoe lock.

17. The system of claim 15 including a resilient latch mounted on the shoe for retaining the shoe lock in the undeployed position.

18. The system of claim 17 wherein the shoe lock and the latch are configured so that the shoe lock is manually latchable and unlatchable.

19. The system of claim 15 wherein the shoe lock is pivotally movable between the deployed and undeployed positions and is downwardly dependent from the shoe in the deployed position.

20. The system of claim 14 wherein the second one of the extruded elements can be formed with different profiles establishing different lengths for the support arm.

21. The system of claim 20 wherein the second one of the extruded elements is formed with code lines indicating the length of the arm.

22. The system of claim 14 including a resin guide mounted on the shoe.

23. The system of claim 22 wherein of a mid-region of the shoe is formed with a locking slot for receiving the resin guide.

24. The system of claim 14 wherein the sash support arm is pivotally mounted on the sash stile to move to the outwardly extending position to support the sash upon engagement with the platform shaped lower region and to move to the downwardly dependent position upon disengagement with the platform shaped lower region.

25. The system of claim 24 wherein the sash support arm braces against a mounting bracket limiting movement of the sash support arm beyond the outwardly extending and downwardly dependent positions.

26. The system of claim 14 wherein the shoe can be formed with different widths established by different predetermined lengths of the first extruded element.

27. The system of claim 26 wherein each width of the shoe is connectable to a respective number of counterbalance elements.

28. A sash support comprising:

a. sash support arms movably mounted respectively on each stile of a sash so that the support arms hang downward in dependent positions when not supporting the sash and move outward to braced positions in response to engagement of the support arms with locked sash shoes as the sash is lowered between the shoes so that the weight of the lowered sash urges the sash support arms outward on the shoes to the braced positions; and

b. the support arms in the braced positions having end regions resting on the sash shoes in sash support regions of the shoes vertically under counterbalance regions of the shoes where counterbalance elements connect to the shoes to minimize moment arms tending to turn the shoes around horizontal axes.

29. The support of claim 28 wherein mounting brackets pivotally mount the support arms on the sash stiles and limit movement of the support arms beyond the dependent and braced positions.

30. The support of claim 28 wherein the sash support arms are formed from a metal extrusion.

31. The support of claim 30 wherein the extrusion can be formed with different profiles each establishing a different arm length with extruded coding lines indicating the support arm length.

32. The support of claim 28 wherein the shoes are formed from a metal extrusion.

33. A sash support comprising:

a. sash support arms movably mounted respectively on each stile of a sash so that the support arms hang downward in dependent positions when not supporting the sash and move outward to braced positions in response to engagement of the support arms with locked sash shoes as the sash is lowered between the shoes so that the weight of the lowered sash urges the sash support arms outward on the shoes to the braced positions; and

b. the support arms in the braced positions having end regions resting on the sash shoes in sash support regions of the shoes vertically under counterbalance regions of the shoes where counterbalance elements connect to the shoes to minimize moment arms tending to turn the shoes around horizontal axes, wherein the shoes are formed from a metal extrusion that forms the counterbalance regions vertically above the sash support regions that are engaged by the end regions of the support arms in their braced positions.

34. The support of claim 33 wherein the support regions of the shoes extend toward the sash stiles to engage the support arms in their dependent positions when the sash is lowered into engagement with the shoes.

35. The support of claim 34 wherein the support arms move from their dependent positions to their outward braced positions by sliding along the support regions of the shoes as the sash is lowered.

36. A system locking counterbalance shoes to window jambs while a sash supported on the shoes is removed from between the window jambs, the system comprising:

a. the shoes having hooks that are pivotally mounted on the shoes below sash supporting platforms of the shoes so that the hooks can move between latched and unlatched positions while the sash is supported on the platforms;

b. the hooks in the unlatched positions hanging dependently downward from the shoes below the sash supporting platforms where the hooks are disposed to hook under lances formed in the jambs as the shoes rise;

c. the hooks in the latched positions being retained out of engagement with the jambs and clear of the lances; and

d. resilient latches are carried on the shoes for holding the hooks in the latched positions.

37. The system of claim 36 wherein the hooks are manually movable into the latched positions and are released from the latched positions by pressing between ends of the hooks and the latches.

38. A system locking counterbalance shoes to window jambs while a sash supported on the shoes is removed from between the window jambs, the system comprising:

a. the shoes being formed from a metal extrusion and having hooks also formed from a metal extrusion with the hooks pivotally mounted on the shoes below sash supporting platforms of the shoes so that the hooks can move between latched and unlatched positions while the sash is supported on the platforms, the shoes having grooves that receive pivot pins supporting the hooks, and slots that retain resilient latches for holding the hooks in the latched positions;



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NOTICE OF ALLOWANCE AND FEE(S) DUE

06/01/2005

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118 NORTH TIoga ST
ITHACA, NY 14850

EXAMINER

STRIMBU, GREGORY J

ART UNIT

PAPER NUMBER

3634

DATE MAILED: 06/01/2005

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 08/839,161 | 04/22/1997 | WILLIAM P. NEWTON | RCA.L - 5 | 9755 |

TITLE OF INVENTION: SUPPORT SYSTEM FOR LATERALLY REMOVABLE SASH

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE | PUBLICATION FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|-----------|-----------------|------------------|------------|
| nonprovisional | NO | \$1400 | \$0 | \$1400 | 09/01/2005 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

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B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

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(Depositor's name)

(Signature)

(Date)

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 08/839,161 | 04/22/1997 | WILLIAM P. NEWTON | | 9755 |

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| APPLN. TYPE | SMALL ENTITY | ISSUE FEE | PUBLICATION FEE | TOTAL FEE(S) DUE | DATE DUE |
|--------------------|--------------|-----------|-----------------|------------------|------------|
| nonprovisional | NO | \$1400 | \$0 | \$1400 | 09/01/2005 |
| EXAMINER | ART UNIT | | CLASS-SUBCLASS | | |
| STRIMBU, GREGORY J | 3634 | | 049-446000 | | |

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
 "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

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(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): Individual Corporation or other private group entity Government

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 The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
 b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____

Date _____

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Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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| 020808 | 7590 | 06/01/2005 | EXAMINER | |
| | | | STRIMBU, GREGORY J | |
| | | ART UNIT | | PAPER NUMBER |
| | | 3634 | | |

DATE MAILED: 06/01/2005

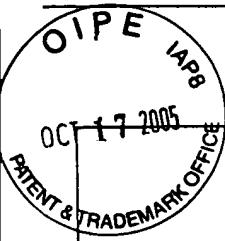
Determination of Patent Term Extension under 35 U.S.C. 154 (b)
(application filed after June 7, 1995 but prior to May 29, 2000)

The Patent Term Extension is 0 day(s). Any patent to issue from the above-identified application will include an indication of the 0 day extension on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

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Notice of Allowability

| Application No. | Applicant(s) | |
|--------------------|---------------|--|
| 08/839,161 | NEWTON ET AL. | |
| Examiner | Art Unit | |
| Gregory J. Strimbu | 3634 | |

- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTO-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to the amendment of 4/28/05 and the tele. Int. of 5/12/05.
2. The allowed claim(s) is/are 1-11, 18, 21, 39-60, 62, 63 and 66-73.
3. The drawings filed on 23 April 1997 are accepted by the Examiner.
4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some*
 - c) None
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of
 Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO-1449 or PTO/SB/08),
 Paper No./Mail Date _____
4. Examiner's Comment Regarding Requirement for Deposit
 of Biological Material
5. Notice of Informal Patent Application (PTO-152)
6. Interview Summary (PTO-413),
 Paper No./Mail Date 5/12/05.
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other _____.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Eugene Stephens on May 12, 2005.

The application has been amended as follows:

In the abstract:

line 5, changed "a" to --the--

In the claims:

claim 1,

line 14, changed "resting on" to --rest on outer--

claim 2,

line 3, inserted --the-- following "that"

claim 3,

line 2, deleted "in regions"

claim 5,

line 2, inserted --are adapted to be-- following "and" and changed "window jambs" to --the jamb projections--

claim 7,

line 2, changed "of" to --by-- and changed "extrusions" to --extrusion--

claim 8,

line 1, changed "are available in different widths formed as" to --can be formed with different widths.--

deleted lines 2-3

claim 9,

line 1, changed "shoes of" to --each shoe having one of the-- and changed "are" to --is--

line 2, changed "different numbers of" to --a corresponding number of the--

claim 10,

line 1, changed "extrusions" to --extrusion-- and changed "are" to --can be formed--

line 2, deleted "available" and deleted "to fit different jamb dimensions"

claim 11,

line 1, deleted "different length"

line 2, changed "size" to --a size thereof--

claim 18,

line 4, changed "in" to --to--

line 6, changed "formed as" to --comprising--

line 7, inserted --with respect to the jambs-- following "shoes"

line 8, inserted --including-- following the second occurrence of "and"

line 10, changed "of" to --from--

line 11, deleted "extending for a width of"

line 12, deleted "each of the shoes, . . . each of the shoes"

line 14, changed "the configuration extending in . . . extrusion" to --each shoe

comprising a single piece having--

line 15, deleted "profile from"

line 16, changed "to" to --and--

claim 21,

line 4, changed "in" to --to--

line 5, changed "of" to --from--

line 6, deleted "extending for a width of each of the shoes"

changed lines 8-13 to --including latch retaining grooves for receiving hook latches and pin grooves for receiving pivot pins of the hook latches and each shoe includes a mid-region being formed to support a guide that slides in a respective one of the jambs to guide vertical movement of the shoe and includes a guide retaining groove for receiving the--

line 15, changed "the configuration . . . extrusion" to --each shoe comprising a single piece having--

line 16, deleted "profile from"

line 17, changed "to" to --and--

claim 39,

line 2, changed "of" to --from--

line 9, changed "extends" to --is in an outwardly extending position extending--

claim 46,

line 1, deleted "the configuration of"

claim 47,

line 2, changed "supporting" to --to support--

line 4, changed "hanging" to --dependent--

claim 48,

line 3, changed "hanging" to --dependent--

claim 49,

line 1, changed "is available in" to --can be formed with--

line 2, deleted "to"

line 3, deleted "accommodate . . . channels"

claim 50,

line 1, changed "upper regions of different" to --each width of the--

line 2, changed "widths . . . numbers" to --is connectable to a respective number--

claim 51,

line 1, changed "sash support arm is available" to --second one of the extruded elements can be formed with--

line 2, deleted "from a plurality of extrusions having"

claim 52,

line 1, changed "plurality of extrusions for the" to --second one of the extruded elements is--

line 2, deleted "sash support arm are" and changed "different arm lengths" to --the length of the arm--

claim 53,

line 8, changed "respective" to --the--

line 11, deleted "any"

claim 54,

line 2, changed "downwardly" to --dependent--

line 3, deleted "hanging"

claim 55,

line 8, changed "respective" to --the--

line 10, deleted "any"

line 12, changed "of" to --from--

line 13, inserted --the-- following "by"

claim 56,

line 2, changed "downwardly hanging" to --dependent--

claim 57,

line 1, changed "downwardly" to --dependent--

line 2, deleted "hanging"

claim 58,

line 1, changed "of" to --from--

claim 59,

line 1, changed "a plurality . . . for the" to --the extrusion can be formed with--

changed line 2 to --different profiles each establishing a different arm length--

line 3, inserted --the-- following "indicating"

claim 60,

line 1, changed the second occurrence of "of" to --from--

line 2, inserted a period following "extrusion"

claim 62,

line 6, changed "a" to --the--

line 8, inserted --the-- following "in"

line 12, inserted --the-- following "in"

line 14, changed "laches" to --latches--

claim 63,

line 3, changed "hook" to --hooks-- and changed "latch" to --latches--

claim 66,

- line 4, changed "of" to --from--
- line 5, changed "of" to --from--
- line 8, deleted "extrusion-formed"
- line 10, deleted "extrusion formed"
- line 11, deleted the first récitation of "the"
- line 13, inserted --the-- following "in"
- line 17, inserted --the-- following "in"

claim 67,

- line 11, changed "between" to --from--
- line 12, changed "and" to --to--
- line 13, inserted --the-- following "as"
- line 16, deleted "engaged by the sash support"
- line 17, deleted "arms . . . positions"

claim 69,

- line 2, changed "downward" to --downwardly--

claim 70,

- line 1, changed the second occurrence of "of" to --from--

claim 71,

line 1, changed "extrusions are available in" to --extrusion can be formed with--
and inserted --to form-- following "profiles"

line 2, deleted "forming" and deleted "to accommodate . . . window"

line 3, deleted "dimensions"

claim 72,

line 1, changed "extrusions . . . profiles" to --extrusion--

line 2, changed "are" to --is-- and changed "different lengths" to --length--

claim 73,

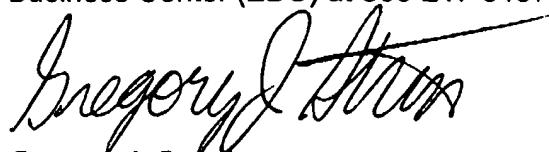
line 1, changed the second occurrence of "of" to --from--

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory J. Strimbu whose telephone number is 571-272-6836. The examiner can normally be reached on Monday through Friday 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 571-272-6867. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3634

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Gregory J. Strimbu
Primary Examiner
Art Unit 3634
May 12, 2005



| | | |
|--------------------|-----------------|---------------|
| Interview Summary | Application No. | Applicant(s) |
| | 08/839,161 | NEWTON ET AL. |
| Examiner | Art Unit | |
| Gregory J. Strimbu | 3634 | |

All participants (applicant, applicant's representative, PTO personnel):

(1) Gregory J. Strimbu. (3) _____

(2) Eugene Stephens. (4) _____

Date of Interview: 12 May 2005.

Type: a) Telephonic b) Video Conference
c) Personal [copy given to: 1) applicant 2) applicant's representative]

Exhibit shown or demonstration conducted: d) Yes e) No.
If Yes, brief description: _____.

Claim(s) discussed: 1-3,5,7-11,18,21,39,46-60,62,63,66,67 and 69-73.

Identification of prior art discussed: None.

Agreement with respect to the claims f) was reached. g) was not reached. h) N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Suggested changes to overcome 35 USC 112 informalities. See the examiner's amendment for the changes made.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

Examiner's signature, if required

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

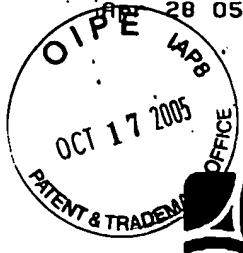
A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner.
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.



BROWN &
MICHAELS, PC

Brown & Michaels PC

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p.1

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APR 28 2005

400 M&T Bank Building
118 North Tioga Street
Ithaca, New York 14850
607-256-2000
Fax: 607-256-3628
e-mail: bpm@bpmlegal.com
web: http://www.bpmlegal.com/

FACSIMILE TRANSMISSION COVER SHEET

Date: Thursday, April 28, 2005
Time: 1:03 PM
From: Eugene Stephens
To: Commissioner for Patents
Re: Office Action Response for 08/839,161
Facsimile #: 703-872-9306
Phone Code: 0688

Number of Pages (including this cover sheet): 14

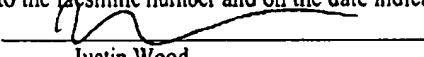
Faxed with this cover sheet is the following:

Office Action Response for 08/839,161

CERTIFICATE OF FACSIMILE TRANSMISSION

FACSIMILE NO: 703-872-9306 DATE: April 28, 2005

I hereby certify that this correspondence is being transmitted via facsimile to the Commissioner for Patents, Alexandria, VA 22313-1450, to the facsimile number and on the date indicated above.


Justin Wood

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Apr 28 05 01:08P

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APR 28 2005



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

April 28, 2005

Serial No. 08/839,161
Applicant: William P. Newton et al.
Filed: April 22, 1997
Title: Support System for Laterally Removable Sash
Art Unit: 3634
Examiner: Strimbu, Gregory J
Confirmation Number: 9755
Attorney Docket No: RCAL-5

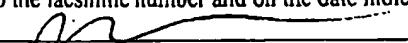
Attorney Docket No.:
HONORABLE COMMISSIONER OF PATENTS
Washington, D.C. 20231

**CORRECTED AMENDMENT
AND RESPONSE TO OFFICE ACTION**

In response to the Office Action dated March 1, 2005, please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 13 of this paper.

| CERTIFICATE OF FACSIMILE TRANSMISSION | |
|---|----------------------|
| FACSIMILE NO: 703-872-9306 | DATE: April 28, 2005 |
| I hereby certify that this correspondence is being transmitted via facsimile to the Commissioner for Patents, Alexandria, VA 22313-1450, to the facsimile number and on the date indicated above. | |
|  Justin Wood | |

AMENDMENTS OF THE CLAIMS

A detailed listing of all claims in the application is presented below. This listing of claims will replace all prior versions, and listings, of claims in the application. All claims being currently amended are submitted with markings to indicate the changes that have been made relative to immediate prior version of the claims. The changes in any amended claim are being shown by strikethrough (for deleted matter) or underlined (for added matter).

1. (Previously Presented) A system supporting a sash that is laterally removable from between opposed window jambs, the system comprising:
 - a. a pair of sash support arms mounted to hang freely downward on respective opposite stiles of the sash and to pivot from downwardly hanging positions to outwardly extended positions that the support arms assume when supporting the sash;
 - b. the sash support arms in the downwardly hanging positions being disposed so that as the sash is lowered toward a supported position, the downwardly hanging arms engage sash supporting platforms of counterbalanced sash shoes locked into the jambs so that sash-lowering engagement between the arms and the platforms pivots the arms outward along the platforms; and
 - c. outer end regions of the sash support arms in the outwardly extended positions resting on regions of the platforms spaced from the sash and arranged vertically under counterbalance elements connected to the shoes to support the weight of the sash.
2. (Original) The system of claim 1 wherein the sash supporting platforms of the shoes extend toward the sash stiles so that inner regions of the platforms engage the sash support arms in the downwardly hanging positions and so that outer regions of the platforms engage the outer end regions of the sash support arms in the outwardly extended positions.

3. (Original) The system of claim 2 wherein the counterbalance elements are connected to the shoes in regions vertically above the outer platform regions.
4. (Original) The system of claim 1 wherein the shoes include locking elements deployable to lock the shoes to jamb projections during removal and replacement of the sash.
5. (Original) The system of claim 4 wherein the locking elements are pivotally mounted on the shoes and latched in undeployed positions out of engagement with window jambs.
6. (Original) The system of claim 4 wherein the locking elements are formed as extruded metal hooks.
7. (Previously presented) The system of claim 1 wherein the shoes and the sash support arms are each formed of metal extrusions.
8. (Original) The system of claim 7 wherein the shoes are available in different widths formed as different predetermined lengths of the shoe extrusion so that different widths of shoes fit different widths of jamb channels.
9. (Original) The system of claim 8 wherein shoes of different widths are adapted to connect to different numbers of counterbalance elements.
10. (Original) The system of claim 7 wherein the extrusions for the sash support arms are available in different lengths to fit different jamb dimensions.
11. (Original) The system of claim 10 wherein the different length sash support arms have extruded code lines indicating size.
12. (Cancelled)
13. (Cancelled).
14. (Cancelled).
15. (Cancelled)
16. (Cancelled).

17. (Cancelled)

18. (Currently amended) The improvement of claim 16 wherein the In a system counterbalancing a window sash supported by a pair of counterbalanced sash shoes so that the sash extends between a pair of jambs from which the sash is removable by maneuvering the sash upward and laterally while the shoes are locked in the jambs, the improvement comprising:

a. the shoes including locking elements are formed as hooks that catch on and engage the jamb projections, to lock the shoes during sash removal and replacement and the shoes have latches that latch the locking elements in undeployed positions out of engagement with the jamb projections and the shoes being formed of a metal extrusion having a predetermined profile extending for a width of each of the shoes, establishing a configuration of each of the shoes;
and

b. the configuration extending in a single piece of the predetermined extrusion profile from a hook-shaped upper region formed to interconnect with a counterbalance element to an L-shaped lower region forming a platform extending toward the sash from vertically below the upper region.

19. (Cancelled)

20. (Cancelled)

21. (Currently amended) In a system counterbalancing a window sash supported by a pair of counterbalanced sash shoes so that the sash extends between a pair of jambs from which the sash is removable by maneuvering the sash upward and laterally while the shoes are locked in the jambs, the improvement comprising:

a. the shoes being formed of a metal extrusion having a predetermined profile extending for a width of each of the shoes The improvement of claim 20, wherein the shoe profile configuration includes and

including a latch retaining groove for receiving a hook latch and a pin groove for receiving a pivot pin of the hook latch and establishing a configuration of a mid-region of each of the shoes being formed to support a guide that slides in each respective one of the jambs to guide vertical movement of each of respective one of the shoes and including a guide retaining groove that receives the guide; and

b. the configuration extending in a single piece of the predetermined extrusion profile from a hook-shaped upper region formed to interconnect with a counterbalance element to an L-shaped lower region forming a platform extending toward the sash from vertically below the upper region.

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (Cancelled)

28. (Cancelled)

29. (Cancelled)

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (Cancelled).

36. (Cancelled)

37. (Cancelled)

38. (Cancelled)

39. (Currently amended) A sash support system comprising:

- a. a plurality of sash support elements each formed of a metal extrusion having a profile establishing a respective configuration of each element;
- b. the configuration of a first one of the extruded elements forming a shoe extending in a single extruded piece from a hook-shaped upper region engaging a counterbalance to a platform-shaped lower region supporting a sash; and
- c. the configuration of a second one of the extruded elements forming a sash support arm pivotally connected to a stile of the sash to engage the platform-shaped lower region of the shoe when the sash support arm is extends outwardly of the sash extended and to drop to a downwardly dependent position when the sash support arm does not engage the platform shaped lower region.

40. (Currently amended) The system of claim 39 wherein the configuration of a third one of the extruded elements forms a shoe lock connected to the shoe below the platform shaped lower region to be movable between deployed and undeployed positions.

41. (Currently amended) The system of claim 40 wherein the shoe profile includes a pin groove for receiving a pivot pin supporting the shoe lock.

42. (Original) The system of claim 40 including a resilient latch mounted on the shoe for retaining the shoe lock in the undeployed position.

43. (Original) The system of claim 42 wherein the shoe lock and the latch are configured so that the shoe lock is manually latchable and unlatchable.
44. (Original) The system of claim 40 wherein the shoe lock is pivotally movable between the deployed and undeployed positions and is downwardly dependent from the shoe in the deployed position.
45. (Original) The system of claim 39 including a resin guide mounted on the shoe.
46. (Previously presented) The system of claim 45 wherein the configuration of a mid-region of the shoe is formed with a locking slot for receiving the resin guide.
47. (Previously presented) The system of claim 39 wherein the sash support arm is pivotally mounted on the sash stile to move to the outwardly extending position supporting the sash upon engagement with the platform shaped lower region and to move to the downwardly hanging position upon disengagement with the platform shaped lower region.
48. (Original) The system of claim 47 wherein the sash support arm braces against a mounting bracket limiting movement of the sash support arm beyond the outwardly extending and downwardly hanging positions.
49. (Original) The system of claim 39 wherein the shoe is available in different widths established by different predetermined lengths of the first extruded element to accommodate different widths of jamb shoe channels.
50. (Previously presented) The system of claim 49 wherein upper regions of different shoe widths connect respectively to different numbers of counterbalance elements.
51. (Previously presented) The system of claim 39 wherein the sash support arm is available from a plurality of extrusions having different profiles establishing different lengths for the support arm.
52. (Previously presented) The system of claim 51 wherein the plurality of extrusions for the sash support arm are formed with code lines indicating different arm lengths.

53. (Previously presented) A sash support comprising:

- a. sash support arms movably mounted respectively on each stile of a sash so that the support arms hang downward in dependent positions when not supporting the sash and move outward to braced positions in response to engagement of the support arms with locked sash shoes as the sash is lowered between the shoes so that the weight of the lowered sash urges the sash support arms outward on the shoes to the braced positions; and
- b. the support arms in the braced positions having end regions resting on respective sash shoes in sash support regions of the shoes vertically under counterbalance regions of the shoes where counterbalance elements connect to the shoes to minimize any moment arms tending to turn the shoes around horizontal axes.

54. (Original) The support of claim 53 wherein mounting brackets pivotally mount the support arms on the sash stiles and limit movement of the support arms beyond the downwardly hanging and braced positions.

55. (Currently amended) A sash support comprising:

- a. sash support arms movably mounted respectively on each stile of a sash so that the support arms hang downward in dependent positions when not supporting the sash and move outward to braced positions in response to engagement of the support arms with locked sash shoes as the sash is lowered between the shoes so that the weight of the lowered sash urges the sash support arms outward on the shoes to the braced positions; and
- b. the support arms in the braced positions having end regions resting on respective sash shoes in sash support regions of the shoes vertically under counterbalance regions of the shoes where counterbalance elements connect to the shoes to minimize any moment arms tending to turn the shoes around horizontal axes. The support of claim 60 wherein the shoes are formed of a metal the extrusion for the shoes that forms the counterbalance regions vertically above the sash support regions that are engaging engaged by end regions of the support arms in the their braced positions.

56. (Original) The support of claim 55 wherein the support regions of the shoes extend toward the sash stiles to engage the support arms in their downwardly hanging positions when the sash is lowered into engagement with the shoes.

57. (Original) The support of claim 56 wherein the support arms move from their downwardly hanging positions to their outward braced positions by sliding along the support regions of the shoes as the sash is lowered.

58. (Previously presented) The support of claim 53 wherein the sash support arms are formed of a metal extrusion.

59. (Previously presented) The support of claim 58 wherein a plurality of extrusions for the support arms have different profiles establishing different arm lengths and are provided with extruded coding lines indicating support arm length.

60. (Previously presented) The support of claim 53 wherein the shoes are formed of a metal extrusion

61. (Cancelled)

62. (currently amended) A system locking counterbalance shoes to window jambs while a sash supported on the shoes is removed from between the window jambs, the system comprising:

a. the shoes having hooks that are pivotally mounted on the shoes below sash supporting platforms of the shoes so that the hooks can move between latched and unlatched positions while a sash is supported on the platforms;

b. the hooks in unlatched positions hanging dependently downward from the shoes below the sash supporting platforms where the hooks are disposed to hook under lances formed in the jambs as the shoes rise;

- c. the hooks in latched positions being retained out of engagement with the jambs and clear of the lances; and
- d. The system of claim 61 wherein resilient latches are carried on the shoes for holding the hooks in the latched positions.

63. (Original) The system of claim 62 wherein the hooks are manually movable into the latched positions and are released from the latched positions by pressing between ends of the hook and the latch.

64. (Cancelled)

65. (Cancelled)

66. (Currently Amended) A system locking counterbalance shoes to window jambs while a sash supported on the shoes is removed from between the window jambs, the system comprising:

- a. the shoes being formed of a metal extrusion and having hooks also formed of a metal extrusion with the hooks pivotally mounted on the shoes below sash supporting platforms of the shoes so that the hooks can move between latched and unlatched positions while the sash is supported on the platforms, the shoes having extrusion-formed grooves that receive pivot pins supporting the hooks, and The system of claim 65 wherein the shoes have extrusion-formed slots that retain the resilient latches for holding the hooks in the latched positions;
- b. the hooks in unlatched positions hanging dependently downward from the shoes below the sash supporting platforms where the hooks are disposed to hook under lances formed in the jambs as the shoes rise; and
- c. the hooks in latched positions being retained out of engagement with the jambs and clear of the lances.

67. (Currently amended) A system supporting a sash that is laterally removable from between opposed window jambs and is supported on counterbalanced shoes that run vertically within the jambs and are separated sufficiently to allow lateral movement of the sash, the system comprising:

- a. the shoes having platforms that extend toward the sash to support the sash;
- b. the sash having a pair of stiles and a pair of support arms connected respectively to the secured to each of two stiles of the sash so that the sash support arms rest in downwardly hanging positions in which lower ends of the support arms engage sash end regions of the shoe platforms when the sash and the support arms are moved downward from above the shoe platforms;
- c. the sash support arms being mounted on the sash to pivot between the downwardly hanging positions and outwardly extending positions in which the sash support arms engage jamb end regions of the shoe platforms as weight of the downwardly moved sash transfers to the shoes via the support arms; and
- d. counterbalance elements exerting a lifting force on the shoes in regions vertically above the jamb end regions of the shoe platforms engaged by the sash support arms in the outwardly extending positions.

68. (Original) The system of claim 67 wherein the shoe platforms are configured with steps that the ends of the support arms slide downward over as the support arms move from the sash end regions to the jamb end regions of the shoe platforms.

69. (Original) The system of claim 67 wherein the sash support arms are braced against movement beyond the downward hanging positions and the outwardly extending positions.

70. (Previously presented) The system of claim 67 wherein the sash support arms are formed of a metal extrusion.

71. (Original) The system of claim 70 wherein the extrusions are available in different profiles forming support arms of different lengths to accommodate the sash to different window dimensions.
72. (Previously presented) The system of claim 71 wherein the extrusions of different profiles are formed with coding lines to indicate the different lengths of the sash support arms.
73. (Previously presented) The system of claim 67 wherein the shoes are formed of a metal extrusion.
74. (Cancelled)
75. (Cancelled)
76. (Cancelled)
77. (Cancelled)
78. (Cancelled)
79. (Cancelled)
80. (Cancelled)
81. (Cancelled)
82. (Cancelled)
83. (Cancelled)
84. (Cancelled)
85. (Cancelled)
86. (Cancelled)
87. (Cancelled)

88. (Cancelled)

89. (Cancelled)

90. (Cancelled)

REMARKS

The only claims remaining in this application are claims that have been allowed or are allowable if made clear under 35 USC 112. All other claims are cancelled, with applicant reserving the right to pursue those claims in continuation applications. Any such continuation applications should be entitled to term extension from the delay incurred in reaching this partial resolution of the parent claims.

The claims that require clarification have been amended to respond to objections raised in the office action. Since the only remaining issues in this application involve claim clarity, the examiner is asked to call applicant's attorney for any corrections that may be necessary.

Because of the many years expended in reaching this point, and because a competitor is infringing the allowed claims, applicant desires a notice of allowance as quickly as possible. Applicant's attorney will call the examiner as soon as this response is complete, to facilitate rapid issuance of the notice of allowance.

CONCLUSION

"Recognizing that Internet communications are not secured, I hereby authorize the PTO to communicate with me concerning any subject matter of this application by electronic mail. I understand that a copy of these communications will be made of record in the application file."

Respectfully Submitted:
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